

Golden Eagle Nesting Habitat Flight # 1

19 August 1987

Observer: Carol McIntyre

Pilot: Buster Points

Craft: Cessna 185 on floats

Depart Bettles:	0950	Total Flight Time:	4 Hr. 20 Min.
Land Takahula Lake:	1045*	Actual Flight Time for Observing	
Depart Takahula Lake:	1050	Nesting Habitat:	3 Hr. 15 Min.
Land Bettles:	1415		

(* Dropped off one passenger.)

Weather:

South of Brooks Range: sunny and clear. Westerly winds at 10 knots, gusting to 20 knots.

North of the Brooks Range: scattered rain and snow showers; localized weather.

Observation of golden eagle nesting habitat began along the Alatna River near the Park boundary just north of Mount Hal Waugh. The following drainages and areas were viewed during flight #1: Upper Alatna, Killik River north to the Park boundary, April Creek, Easter Creek, Castle Mountain area, Chandler Lake, Amiloyak and Agiak Lake, Agiak Creek, Hunt Fork John River, and the John River south to the Park boundary near Tangleblue Creek (Map 1).

(** Use of binoculars was very limited because of the bubble-windows in the aircraft, consequently it was very difficult to make observations of nesting structures. The wind gusts also made it difficult to get close to cliff faces.)

Large stick nests were seen near Pegeeluk Creek (along the Alatna) and on a large isolated south-facing cliff near "The Notch" (along the Kiruktagiak River).

The rock outcrops and cliff faces along the Alatna River and its tributaries seem to provide suitable habitat and substrate for golden eagle nesting. In many areas orange lichen and whitewash (which are frequently found near nesting, perching or roosting areas) were observed on cliff faces. The more rounded hills of the April and Easter Creek drainages probably don't provide excellent nesting substrate but nests could conceivably be found on isolated rock outcrops and cliffs in those drainages.

Many signs of nesting and perching were seen along both sides of the Killik River. Large amounts of whitewash were seen on the south-facing cliffs on Castle Mt. It is likely that Gyrfalcons inhabit these areas.

The large stick nest found near The Notch was probably built by golden eagles. There is a large patch of orange lichen surrounding the nest. No evidence of this year's nesting activity (whitewash, young birds, or adult birds) was noted.

Areas along the northern Park boundary between the Killik and Chandler Rivers were not viewed due to rain and snow storms.

Large amounts of whitewash and orange lichens were seen on

the cliff faces and rock outcrops in the Chandler Lake, Amiloyak Lake and Agiak Lake region. Some of these areas may be inhabited by Ravens or Gyrfalcons, and perhaps Peregrine Falcons.

The rock faces and cliff areas along the Hunt Fork John River and John River also seem suitable for golden eagle nests.

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700 000 FEET (ZONE 5)

30'

R 21 W

R 20 W

152°

R 19 W

NORTH

R 18 W

SCOPE

7540000m. N.

T 36 N

T 35 N

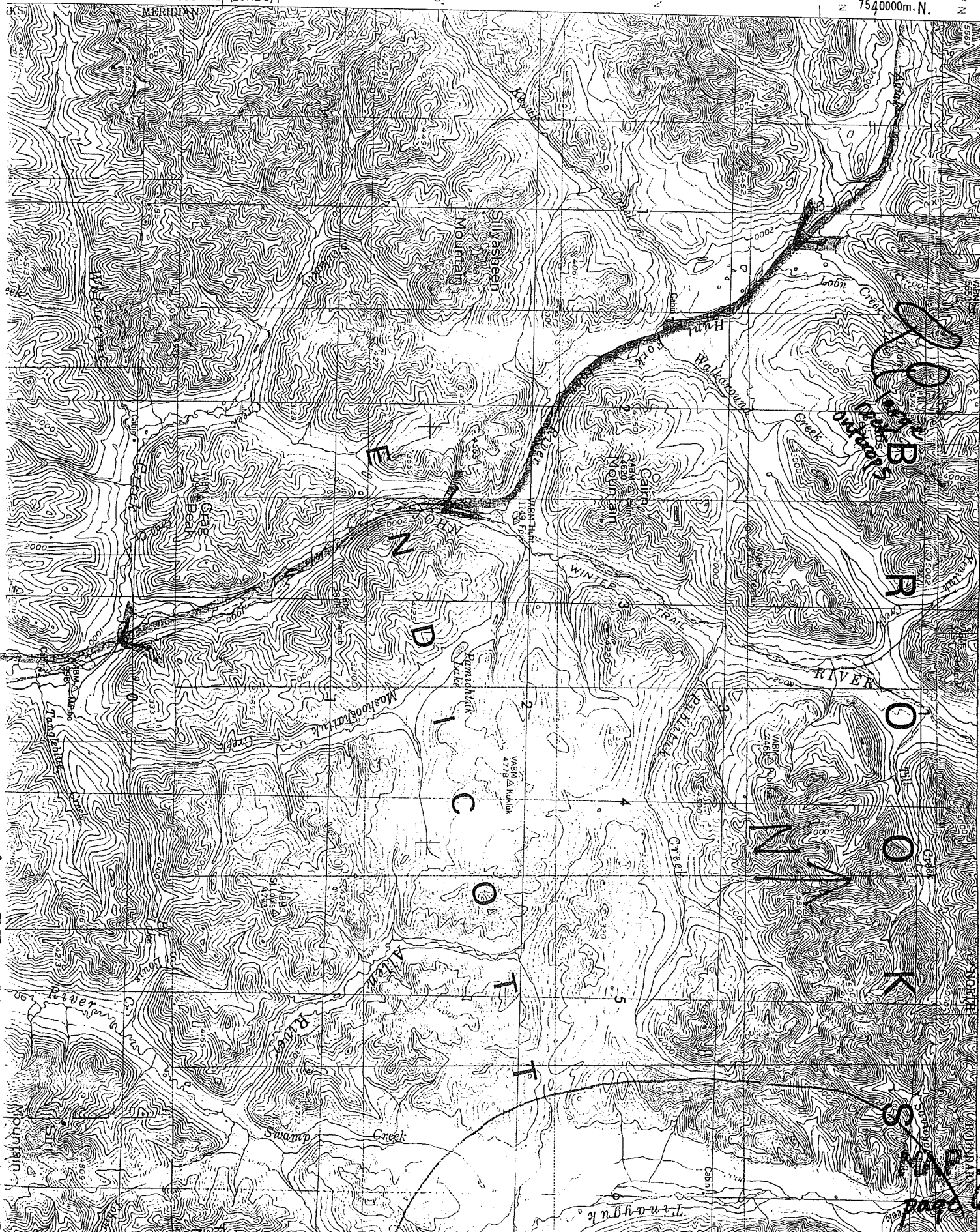
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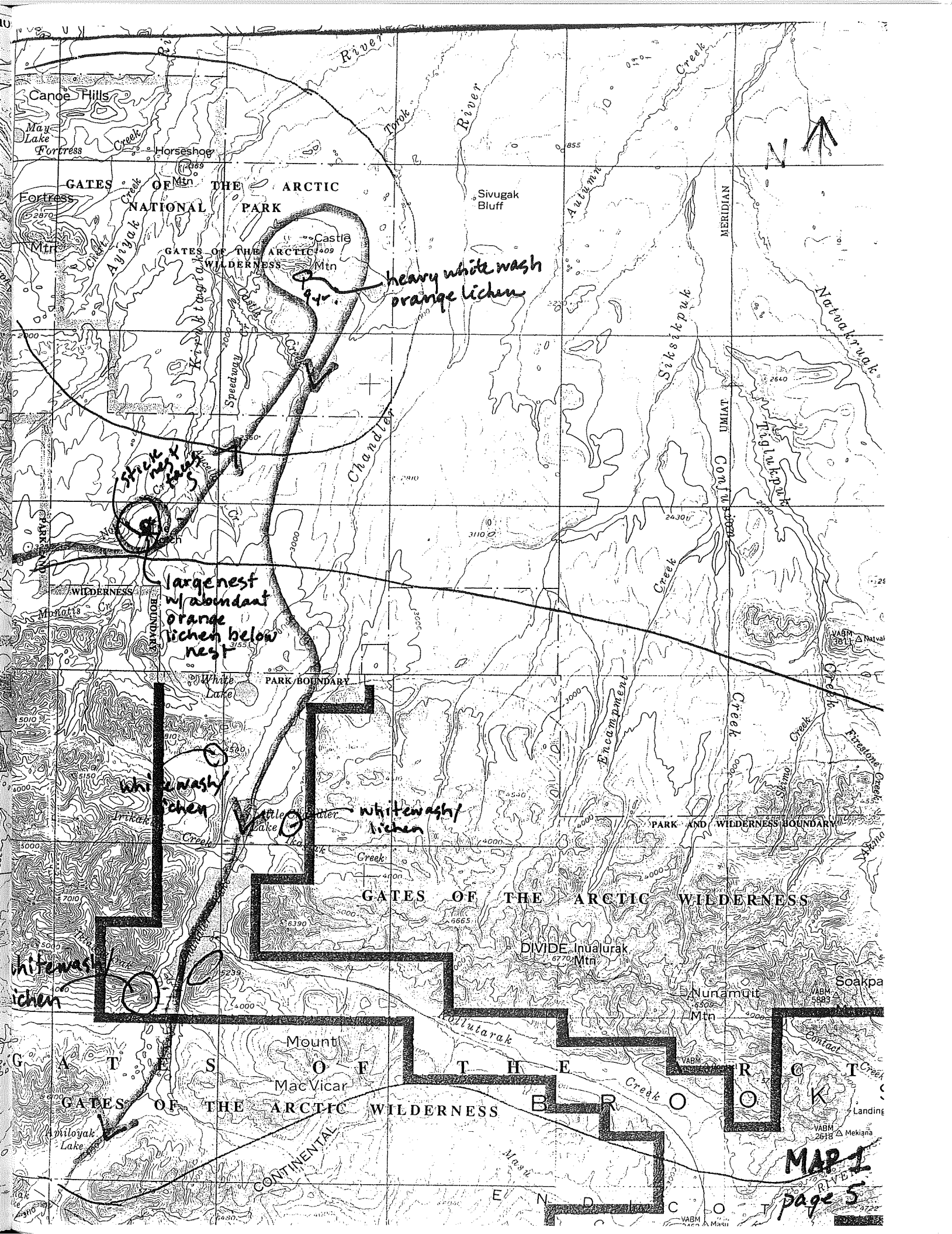
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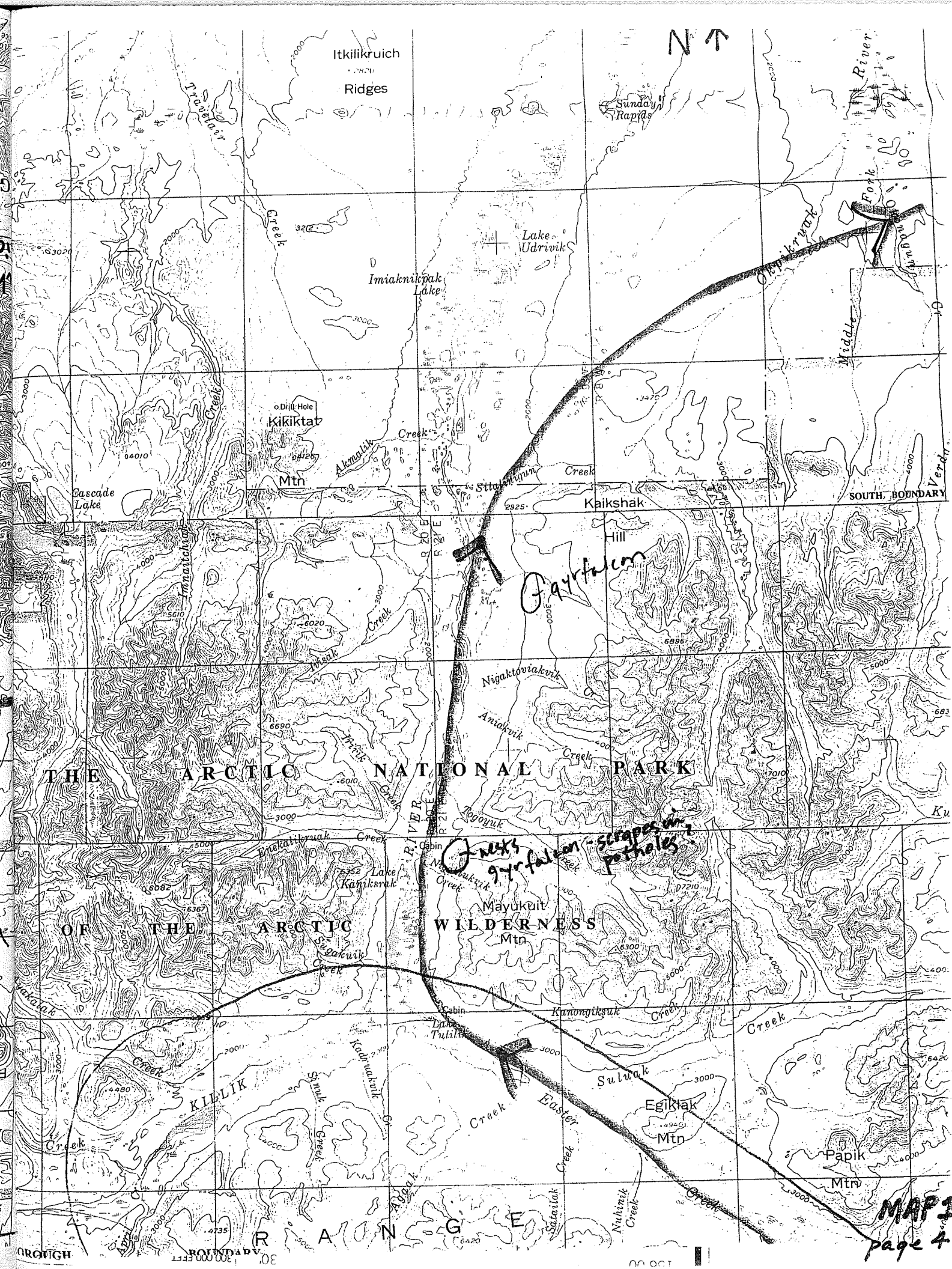
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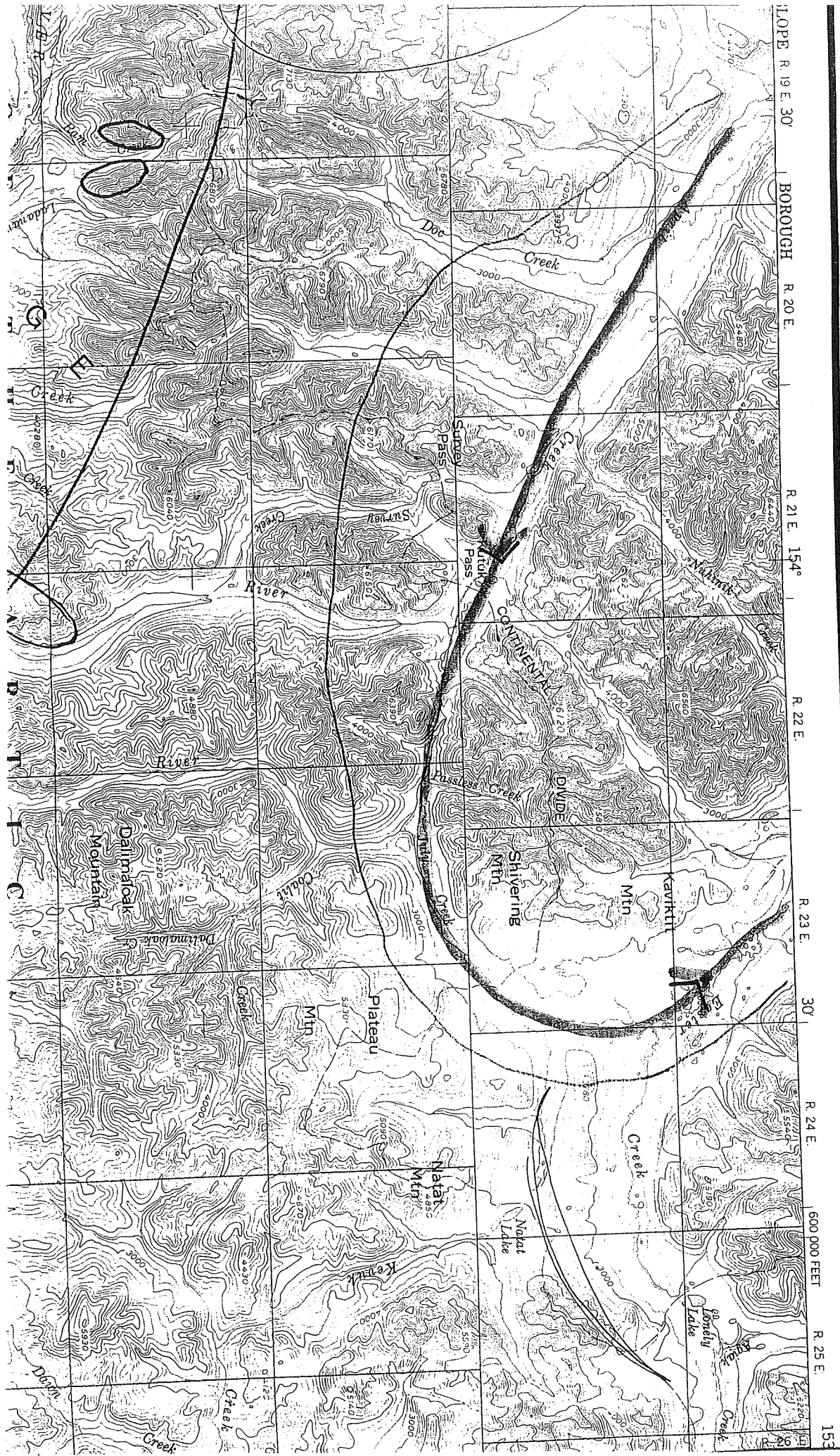


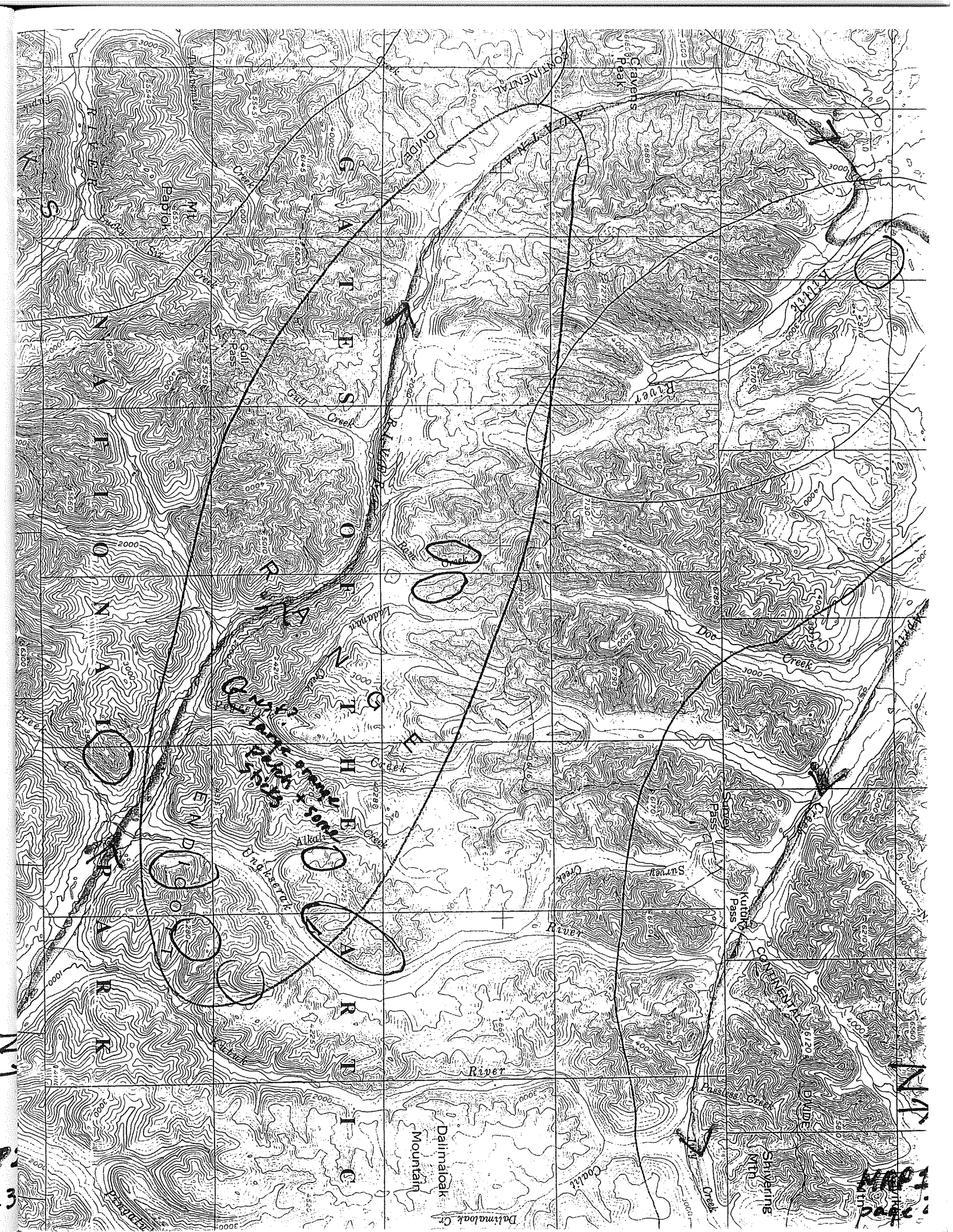


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Raptor Overflight #1 19 August 1987 **MAP 1**

Observer: C. McIntyre

Pilot: B. Points

Ship: Cessna 185 on floats

depart Bettles: 0950

*land Takahula LK: 1045

depart " : 1050

land Bettles: 1415

total flight time **
4 hours 20 minutes

Weather:

South of range: sunny, clear. westerly winds
10 knots gusting to 20 knots

north of range: scattered showers; localized weather

** Actual time for observing nesting habitat

1030 - 1040

1050 - 1355

3 hours 15 minutes

* dropped off one passenger

MAP 1 page

Golden Eagle Nesting Habitat Flight #2

20 August 1987

Observer: Carol McIntyre
Pilot: Buster Points
Craft: PA-18 Super Cub

Depart Bettles:	1530	Total Flight Time:	2 Hr. 15 Min.
Land Bettles:	1745	Actual Flight Time for Nest	
		Observations:	1 Hr. 15 Min.

Weather:

Clear and sunny. Southerly winds < 10 knots.

* Due to limited flight time and the availability of the Super Cub, this flight was conducted to actually find nests. The slow speed of the Super Cub and the good visibility through the windows are advantageous when looking for nesting evidence.

Observations for nests began along the North Fork of the Koyukuk River near Winnie Creek (Map 2).

Three large stick nests were found on an isolated south-facing rock outcrop on the north side of Ipnek Creek. One nest had a small white round object in it, which may have been an addled egg.

Perching or roosting sites, (areas with large amounts of whitewash and orange lichen), were seen along the north side of Michigan Creek, the west facing cliffs on Moving Mountain and Jumbo Creek, and the west facing cliffs north of LaSalle Creek.

Stick nests that had evidence of recent nesting activity were found on a northwest-facing cliff along Jumbo Creek, an isolated south-facing rock outcrop near lower Bonanza Creek and a west-facing rock outcrop just north of Horse Creek. All of these nests had whitewash below the nest. No golden eagles were seen in any of these areas.

The large west-facing cliff along Conglomerate Creek was flown by twice. Although no nesting evidence was seen, I would suggest that this area be investigated from the ground for nesting activity, (especially for peregrine falcons).

The many drainages located in the North Fork area have rock outcropping and cliffs that could provide nesting areas for golden eagles.

RAPTOR HABITAT FLIGHTLINE



Raptor Overflight #2 MAP 2

20 August 1987

Observer: C. McIntyre

Pilot: E. Paine

Ship: PA-18

depart Bellier: 1530Z 2hr 15min

return Bellier: 1745Z

Weather: clear, sunny
south wind

Results: 4 stick nests
3 possibly active in 1987

Many rock outcrops in flight area
many areas with whitewash & orange lichen

* Actual flight for nest observation:
1600Z - 1715Z 1 hour 15 minutes

Golden Eagle Nesting Habitat Flight #3

21 August 1987

Observer: Carol McIntyre
Pilot: Bruce Collins
Craft: Cessna 185 on floats

Depart Bettles:	1000	Total Flight Time: 4 Hr. 20 Min.
Land Itkillik Lake:	1105	Actual Flight Time for Observing
Depart Itkillik Lake:	1150	Nesting Habitat: 3 Hr. 10 Min.
Land Chandler Lake:	1305	
Depart Chandler Lake:	1315	
Land Bettles:	1515	

Weather:

Sunny and clear. Localized winds but overall calm.

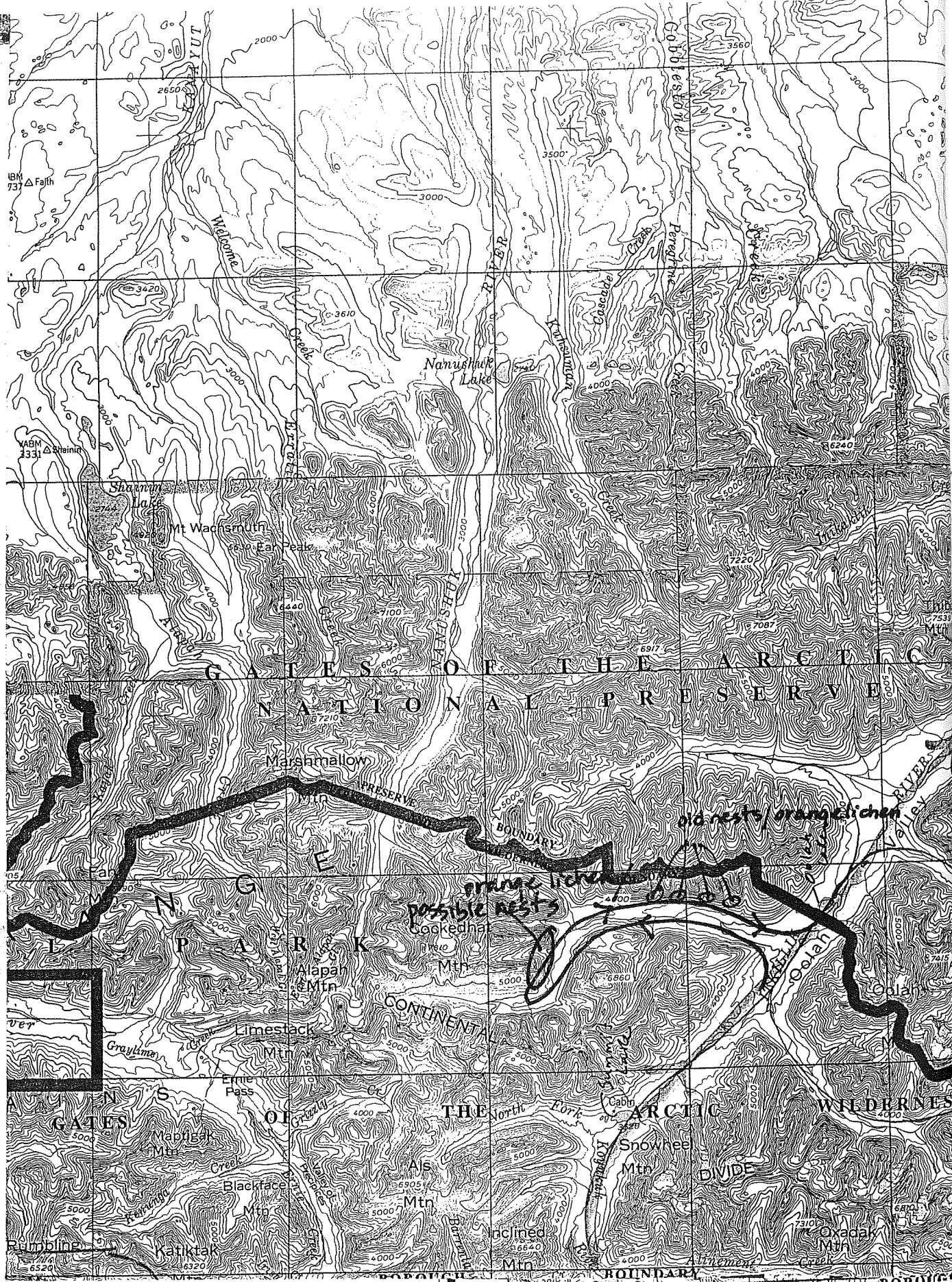
Observations of nesting habitat began along the North Fork of the Koyukuk near Winnie Creek. The following drainages and areas were viewed during flight #3: North Fork Koyukuk north to Summit Lake, the Itkillik River and Oolah Valley (including the drainage directly east of Cockedhat Mt.), the north facing slopes along the northern Park boundary, the Nanushuk Drainage, Alapah Creek and Shainim Lake, Chandler Lake, Kollutarak Creek, Anaktuvak Pass, Contact Creek, upper Anaktuvuk River, Ernie Creek, and the Tinayguk River (Map 3).

(** Use of binoculars was very limited because of the bubble-windows in the aircraft, consequently it was very difficult to make observations of nesting structures.)

Stick nests were seen on the south-facing side of the drainage directly east of Cockedhat Mt. and the north-facing cliffs west of the Anaktuvuk River near Firestone Creek.

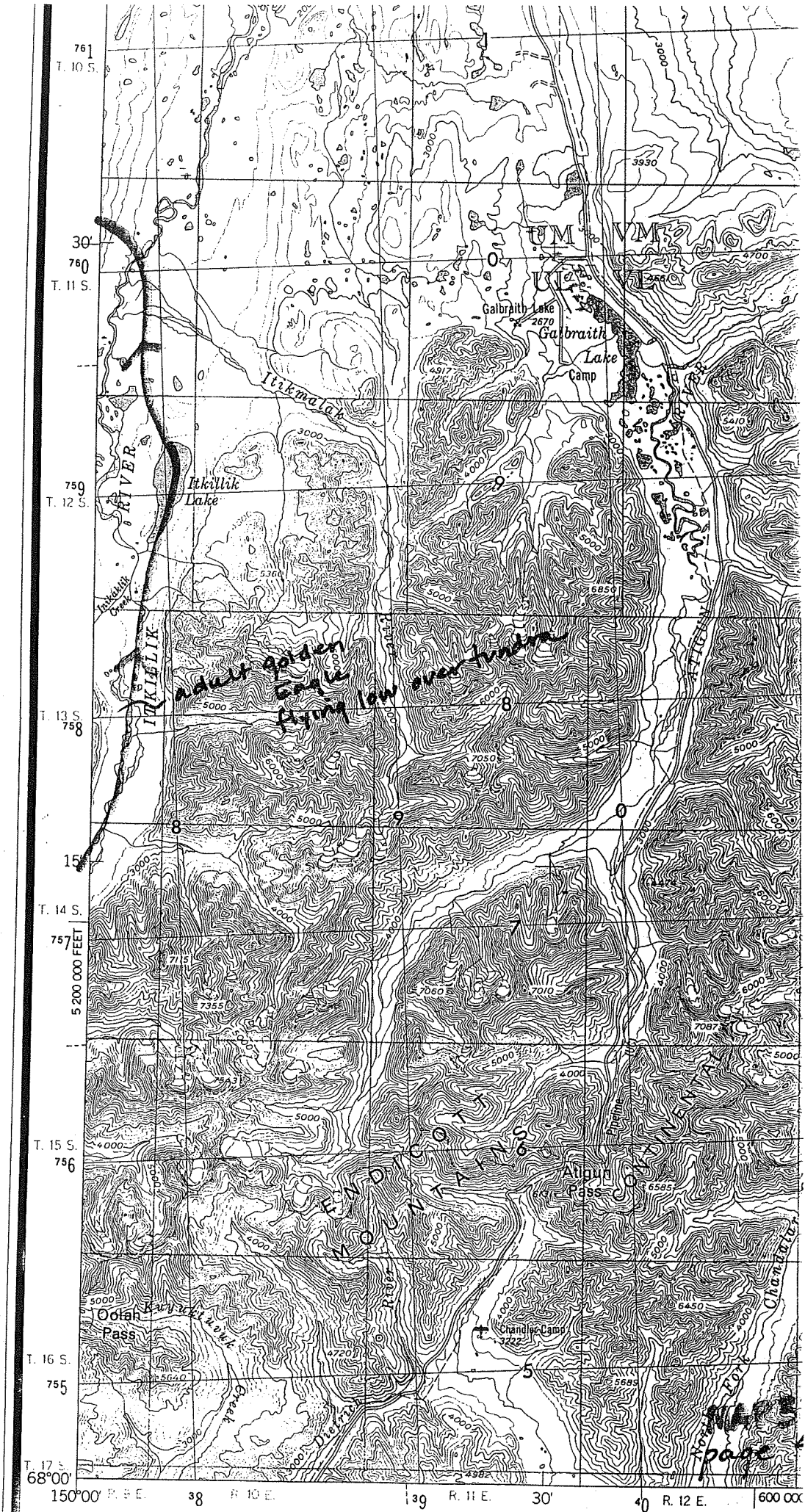
One adult golden eagle was seen flying low over the tundra near Itkillik Lake.

Most of the rock outcrops and cliff areas in all these areas would seem to provide suitable nesting habitat for golden eagles and other cliff nesting raptors.



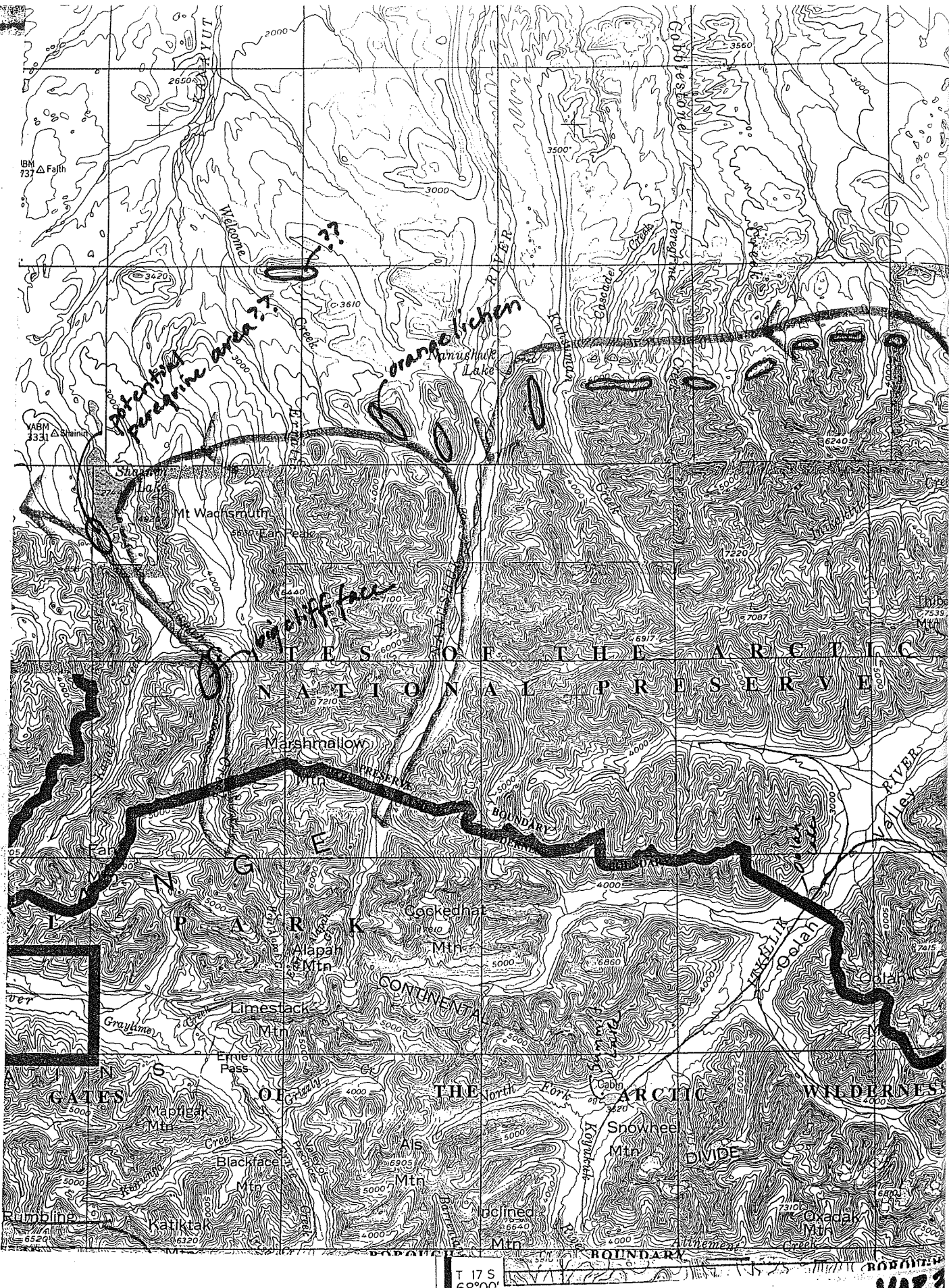
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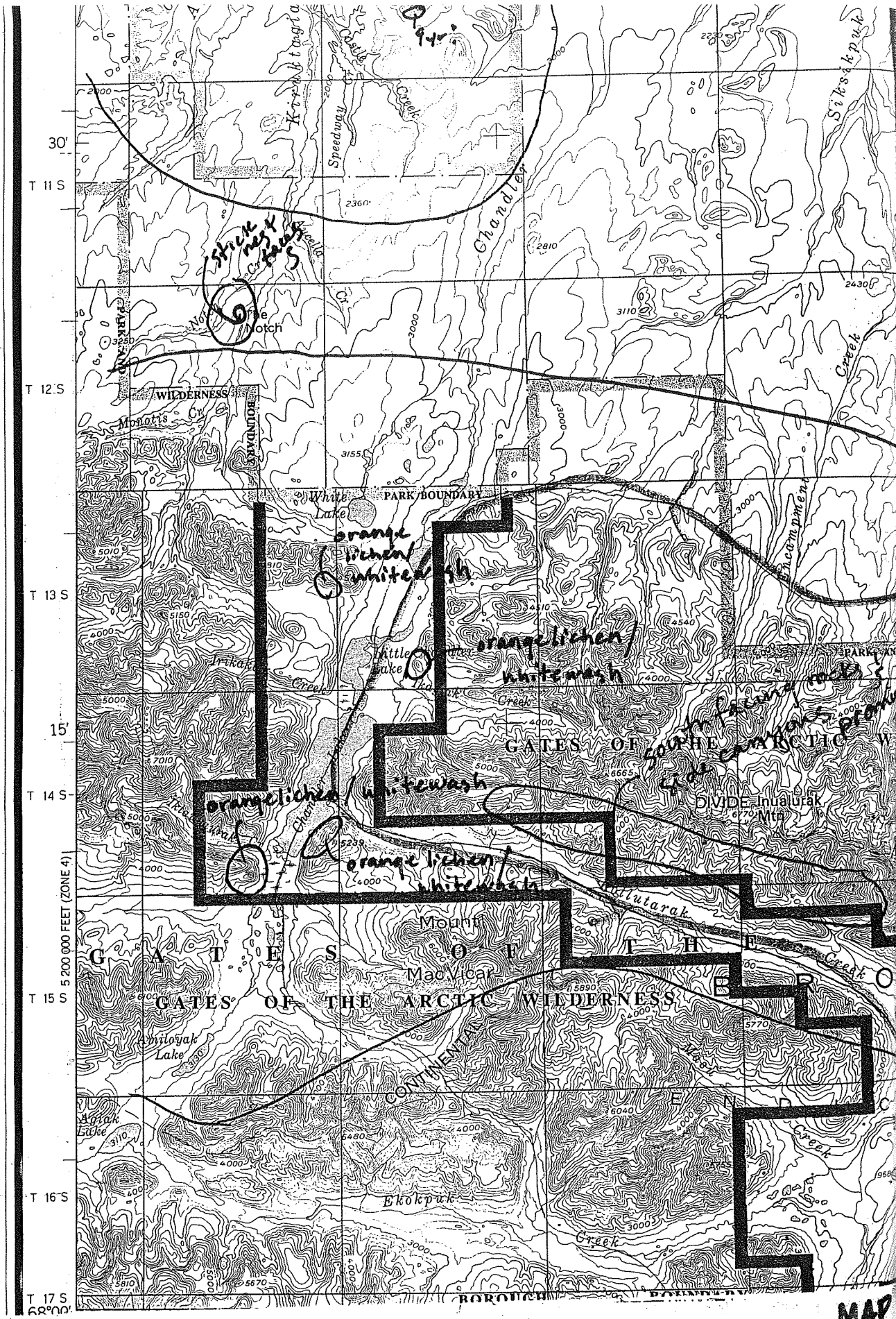


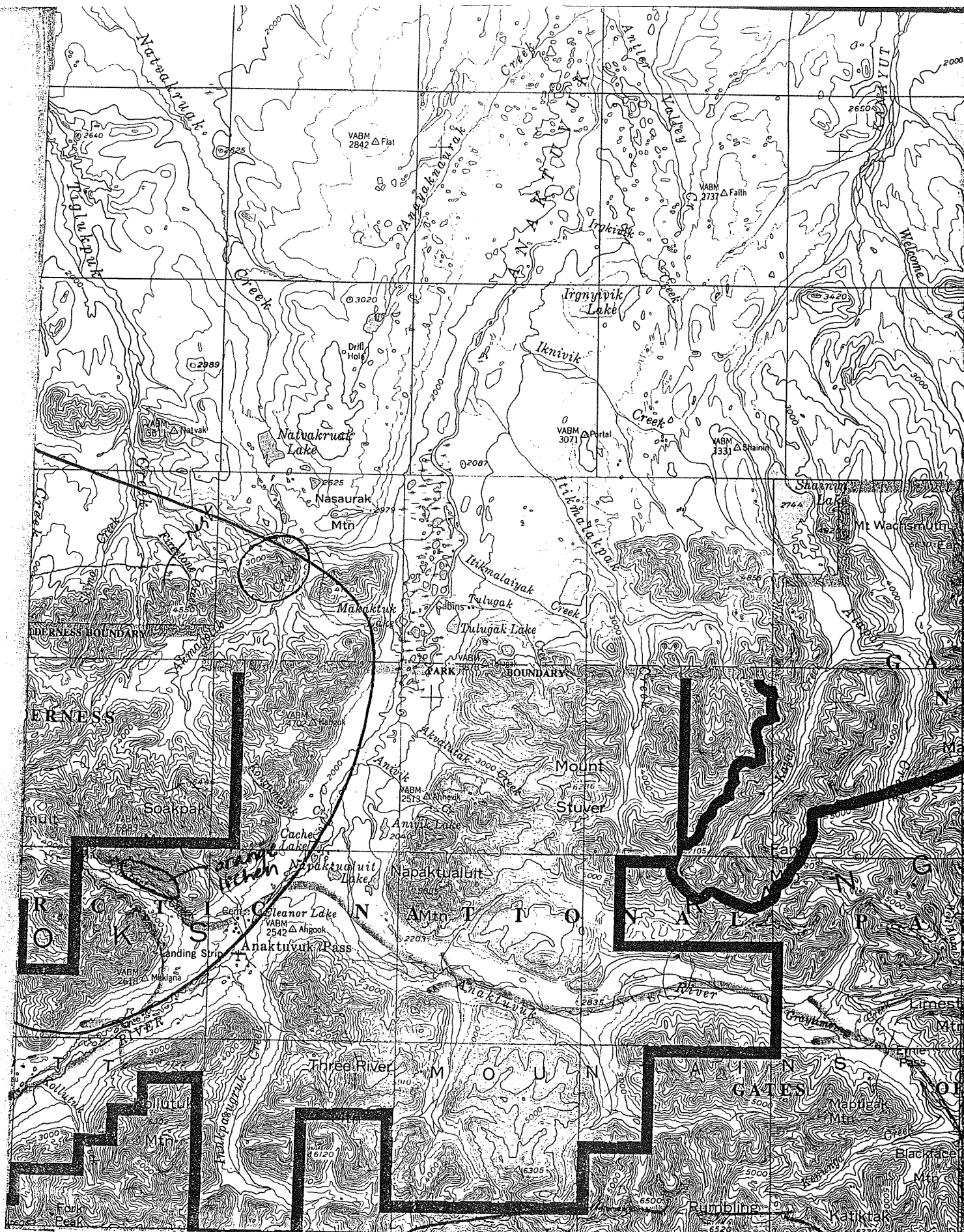
adult golden eagle flying low over timber

MAP page

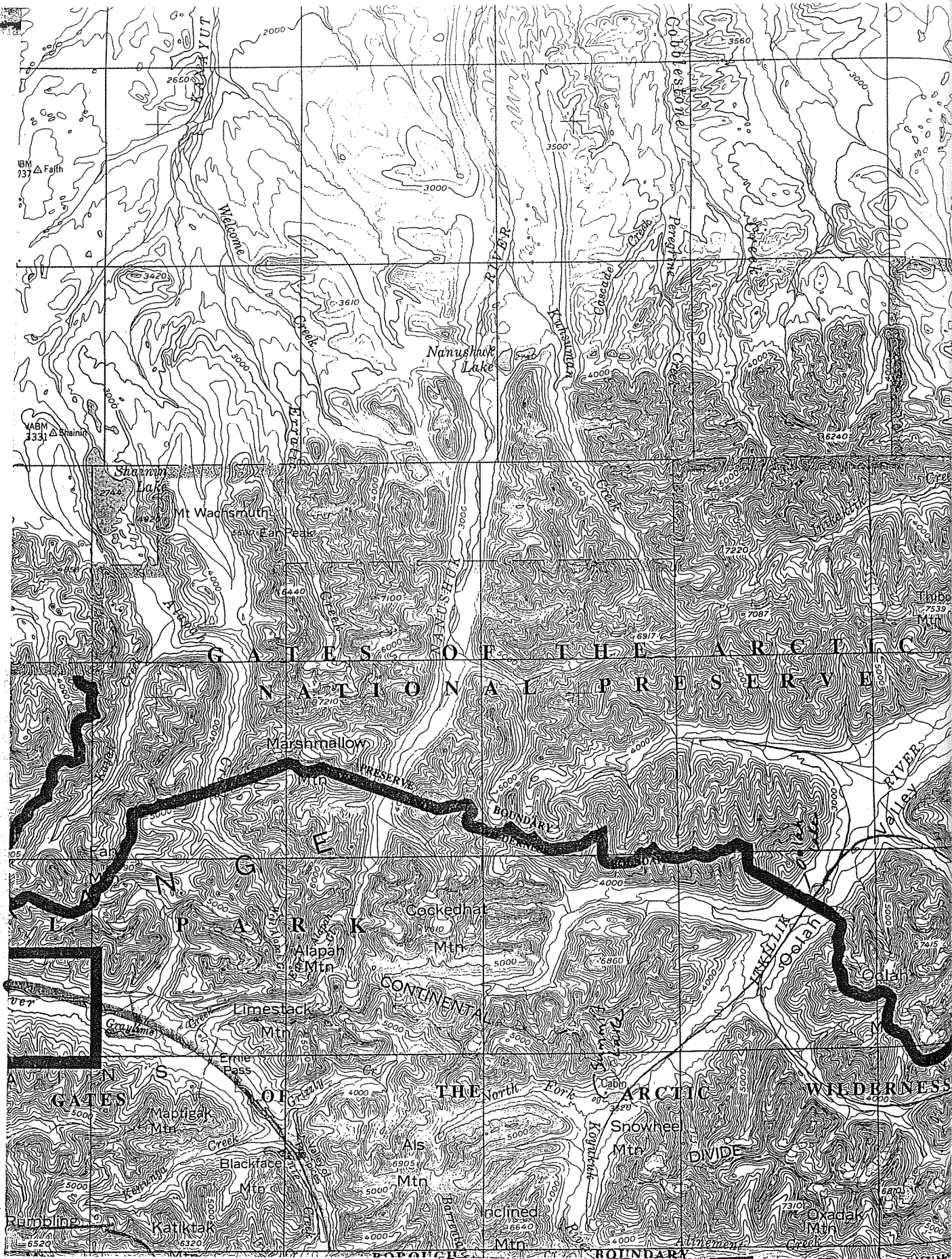


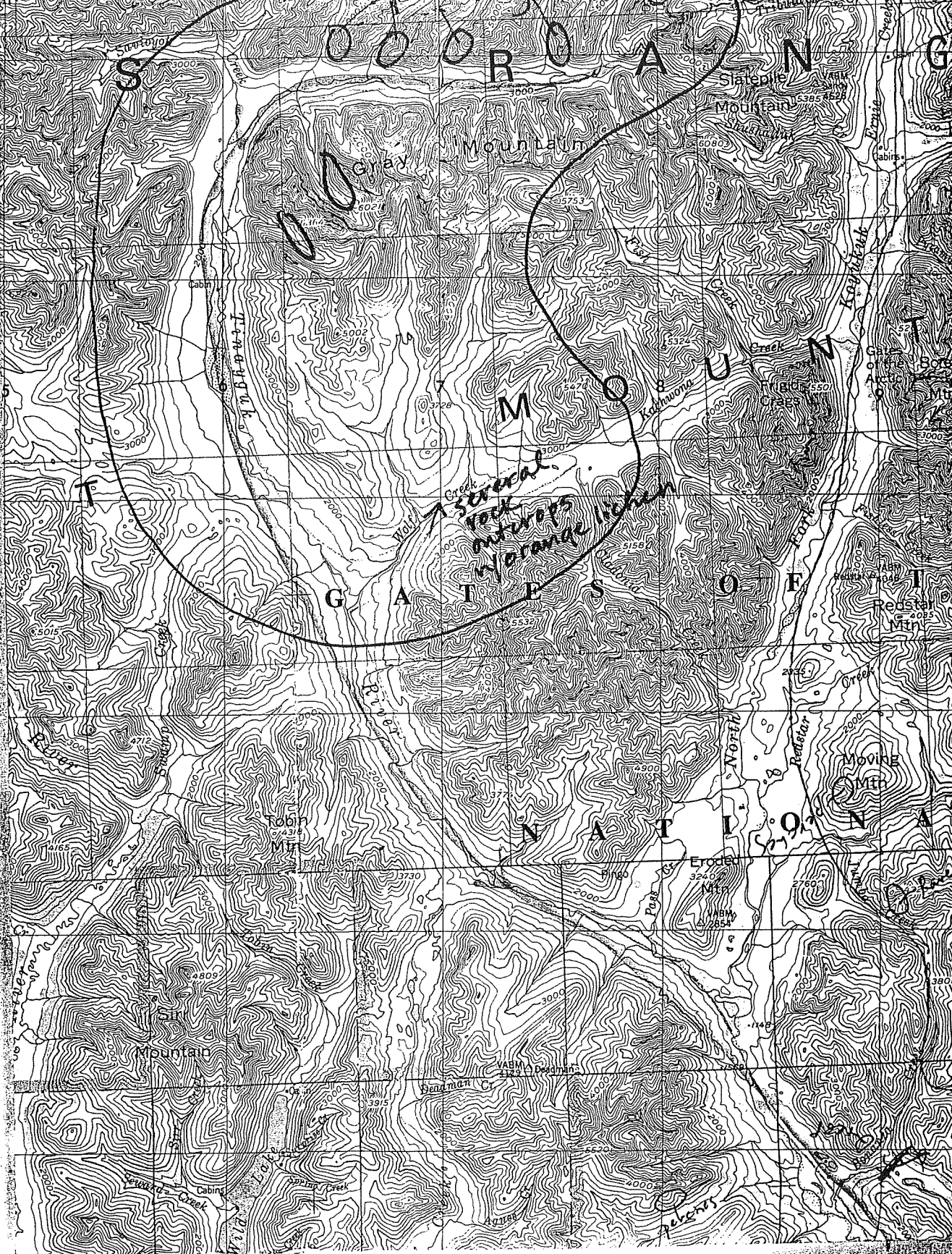
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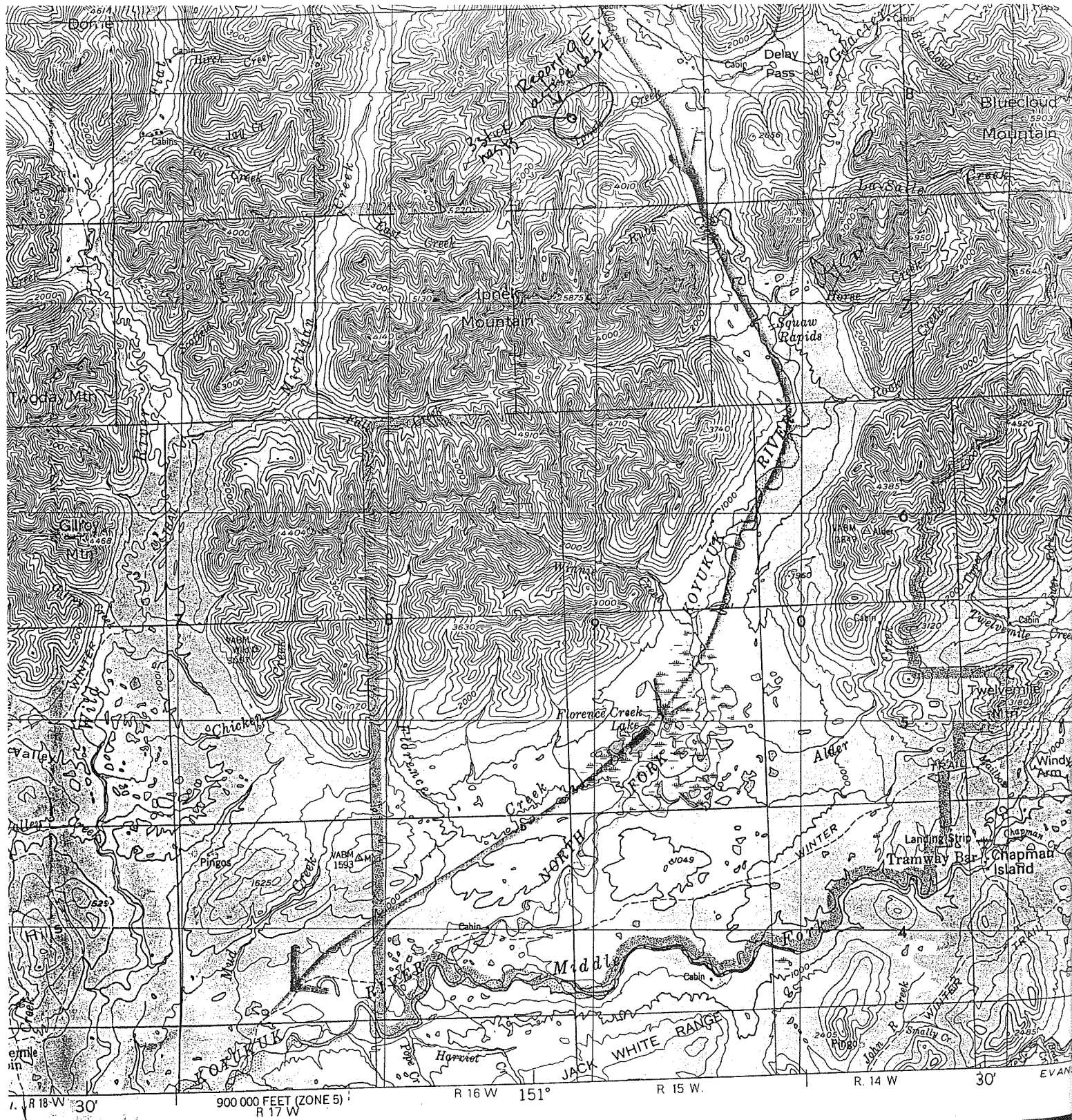




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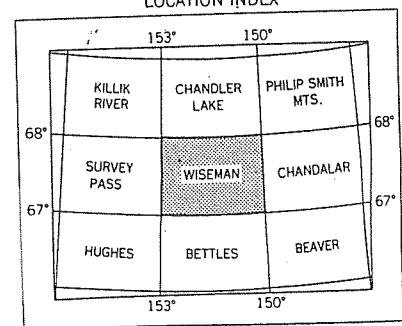
10 15 20 25 MILES

10 15 20 25 KILOMETERS

CONTOUR INTERVAL 200 FEET
 AL GEODETIC VERTICAL DATUM OF 1929
 THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 5
 FROM TRUE NORTH VARIES FROM 26 1/4° (470 MILS) EASTERLY FOR THE
 TO 28° (50 MILS) EASTERLY FOR THE CENTER OF THE EAST EDGE

BY U.S. GEOLOGICAL SURVEY
 WASHINGTON, D.C. 20002

LOCATION INDEX



FEDERAL RESERVATION BOUNDARIES ESTABLISHED BY THE ALASKA NATIONAL

Summary

Seven hours and forty-five minutes of observations for golden eagle nesting habitat were made on 19-21 August in Gates of the Arctic National Park and Preserve from fixed-wing aircraft.

Rock outcrops, cliff faces and rock slopes between 1000'-5000' ASL were searched for evidence of raptor nesting activity (stick nests, orange lichen growing on rocks, and/or whitewash). Areas visited were subjectively evaluated for nesting potential.

Rock outcrops and cliff faces in the observation areas seem to provide suitable nesting substrate for golden eagles. Several stick nests, some with evidence of recent (this year's) nesting activity, were plotted on 1:250,000 USGS topographic maps.

Nesting habitat was subjectively compared to the nesting habitat found in Denali National Park and Preserve. Comparing the area viewed in Gates to areas surveyed in Denali National Park and Preserve this summer where 40 active golden eagle nests were documented, the observer feels that Gates of The Arctic National Park and Preserve probably contains a significant golden eagle population.